

several directions by the folds of the impression of the animal. Although neither head nor tail can be detected, and this Annelide is consequently far from being entire, these convolutions correspond to a length of about 2·20 metres.

The body appears to have been about 0·04 metre broad; its segments are thick. At some places there are externally some indentations, which appeared to me to have arisen rather from some folds of the body than from true feet. The smooth outline of the greater portion of the impression leads me to think that this Annelide was apodous. Within the segments of the body the interannular dissepiments are distinctly visible; they are as close together as in our large species of *Eunices*. These imperfect septa do not reach the intestine. The space separating them communicates with the general cavity of the body, which is perfectly distinct. In the centre of this cavity is seen the intestine, which is free and extends the whole length of the body. It varies in diameter generally from 0·005 to 0·009 metre. It is folded transversely, and these folds have nearly everywhere an imbricated appearance; but at some points where this intestine is distended transversely, and where it has acquired almost 0·015 metre in diameter, these folds are seen not to reach from one side of the intestine to the other, and form rhomboids.

The common cavity of the body evidently contained no other organ. This circumstance consequently removes this Annelide from the *Lumbrici*, the *Hirudines*, and the *Nemertes*. It appears probable to me, that the existing group to which it comes nearest is that of the Annelides Errantes.

The number of fossil naked Annelides is very small. None of the specimens known furnish any idea of the anatomy of these ancient inhabitants of the primitive oceans. On this account the specimen from the bay of St. Sebastian appears to me of considerable importance.—*Ann. des Sci. Nat.*, Nov. 1849.

*Description of a new species of Gorgonia from Australia.*

BY J. E. GRAY, Esq., F.R.S.

PRIMNOA AUSTRALASIE.

Coral elongate, unbranched, rather tapering; cells numerous, regular, placed in close regular circles round the stem, each formed of two series of imbricate calcareous scales.

*Inhab.* Australasian seas, on oyster-shell and stones.

Several specimens of this very interesting coral were sent to the British Museum by the Royal Society of Van Diemen's Land.

This coral is often covered with various species of smaller *Coralines* and *Algæ*. It varies from two to three feet in height. The axis is known from the unbranched species of *Gorgonia* by being more calcareous, and of a pale greyish colour.

Joseph Millingin, Esq., F.L.S., the Secretary of the Royal Society of Van Diemen's Land, has kindly sent me the following particulars of this coral:—

“It was fished up from a depth of some fathoms in D'Entrecasteaux Channel, between the mainland of Tasmania and Bruce's Island. It is found, as you will see, affixed to rocks and stones, and to dead,

broken and half-decayed oyster and scallop-shells, &c. It usually exists in groups or families, varying from three to four to a great many. The long delicate stem, which is horny-looking and highly elastic when dry, varies from the thickness of a knitting-wire to that of a crow-quill, and from its mineralized and root-like attachment, tapers gradually and gracefully to the beautiful acicular point, attaining not unfrequently a length of two or three feet, and having its entire surface covered with a calcareous coat of a cream-yellow colour, delicately annulated, so as much to resemble the fine string of wooden beads worn as a necklace by the poorer natives of Bengal, but with this difference,—that in the coralline the beads form a connected or rather continuous chain, independently of the delicate elastic centre upon which the mineral structure is deposited. I am informed that in one or two instances, when these corallines were procured, they were enveloped throughout with a mucilaginous or jelly-like substance, which when they become dry is exsiccated and shriveled to such a degree as to be scarcely if at all traceable. You will be able to say whether you consider it likely that there exists, in the recent and living state of the zoophyte, such an external and soft organization."

This jelly-like substance was doubtless the polypes.—*From the Proceedings of the Zoological Society for Nov. 27, 1849.*

#### YELLOW RAIN.—DISTRIBUTION OF PLANTS.

*To the Editors of the Annals of Natural History.*

The Willows, Swansea, May 21st, 1850.

GENTLEMEN,—If the following extract from my note-book is worthy of insertion, as likely to interest your readers, or to add one more fact towards the elucidation of the still vexed question of the distribution of plants, it is at your service.

"1850, April 17. Yellow rain fell at the Mumbles at 11 A.M.; leaving spots like ochre. Wind S.W. Weather fine. No clouds. Greenhouse roofs, evergreens, and parties who were out of doors, sprinkled over with spots of the above colour, which are found in my garden here (5 miles N. of the Mumbles), at Penclawd (7 miles N.W.), and at many intermediate places.

"May 11. Notwithstanding the marked changes in the weather, including very heavy rain, many spots still remain, some not much changed in colour. They are perceptible to the finger, and with a lens show a globular structure: the  $\frac{1}{4}$ -inch shows oval, boat-shaped and round echinulated substances.

"May 12. Letter from one of our most acute observers, Mr. Berkeley, to whom I had sent specimens:—

"The yellow spots consist principally of pollen-grains, probably those of some *Salix* . . . . I believe that there are three bands as seen from above, and a single one when the grains are seen laterally, which agrees with *Salix* . . . . I find also traces of fungi among the grains, but cannot tell exactly what species.

"May 21. Most of the spots at the Mumbles faded, but some still yellow."

MATTHEW MOGGRIDGE.